



Collaborative Innovation Center of Quantum Matter:

Highlighting the quantum golden triangle

The Collaborative Innovation Center of Quantum Matter (CICQM) was founded on the premise that to tackle ambitious challenges in quantum matter research, it is vital to bring together world-class scientists and exceptional technological resources from different organizations.

CICQM was established in 2012 as a joint venture of Peking University, Tsinghua University and the Institute of Physics at the Chinese Academy of Sciences, in line with the mission and vision of the National 2011 Plan. Initiated by the Ministry of Education and Ministry of Finance of China, the 'National 2011 Plan' is a topically diverse, centre-based programme supporting multi-institutional collaborations in research and education of the highest quality. CICQM was launched in 2013 as one of the 14 proposals selected in the first round of the National 2011 Plan.

CICQM has its roots in decades of fruitful collaborations among physicists at Peking University, Tsinghua University and the Institute of Physics. These three partner institutions each have excellent individual reputations in the physical sciences and are located in the Zhongguancun region of Beijing, about two miles away from each other. As a result of these advantages, CICQM is becoming the core of this fast-growing 'quantum golden triangle', combining the specific strengths of the partner institutions in a new organization

that has an open and deeply collaborative atmosphere.

CICQM aims to make new discoveries by focusing on fundamental problems in quantum matter science and to provide leadership for the country pertaining to new quantum materials and phenomena that could ultimately address national needs, including innovation and sustainability. CICQM encompasses six research areas: novel quantum and topological states; high-temperature superconductivity; quantum structures and properties in low-dimensional systems; mesoscopic optical and cold atomic/molecular physics; many-body and strongly correlated quantum systems; and the development of experimental facilities and techniques. In each area, collaborations are highly encouraged between partner institution members and also at an international level.

In the period 2013–2014, CICQM had 431 Science Citation Index publications, many of which appeared in prestigious scientific journals such as *Science*, *Nature* journals and *Physical Review Letters*. In addition, CICQM members have harvested many national and international awards, including the Benjamin Franklin Medal, the Asian Union of Magnetism Societies Award, the Elsevier Most Cited Chinese Researchers Award and the State Natural Science Award.

Led by Xin-Cheng Xie, Qi-Kun Xue and Hong Ding (pictured above right), CICQM has about 170 members from the three partner institutions. Of these team

members, 17 are members of the Chinese Academy of Sciences, 12 are winners of the National Thousand Talent Plan for Global Experts, 52 are winners of the National Science Foundation of China Program for Distinguished Young Scholars, 20 are Cheung Kong Scholars and 34 are winners of the National Thousand Talent Plan for Young Scholars.

CICQM is looking for new researchers of all levels to join our team. Successful applicants will hold primary appointments in the School of Physics at Peking University, the Department of Physics at Tsinghua University or the Institute of Physics at CAS and will have the same rights and responsibilities as other members of these institutions. Positions include distinguished chair professors, tenured full/associate professors, tenure-track associate/assistant professors and postdoctoral fellows. Applicants selected by the CICQM Search Committee based on its own cross-institutional standards will gain supplementary financial support and full access to CICQM's scientific platforms to extend their academic capabilities and opportunities.



Contact

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